- 11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 16. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. Formerly permit number S-1136-47-0.
- 20. Formerly permit number S-1548-186-2.
- 21. Formerly permit number S-3898-5.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA
5-1738-354-1: Jun 28 2010 9:54AM - SIONGCOJ

PERMIT UNIT: S-1738-355-1

SECTION: 04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2005 SERVED BY VAPOR CONTROL

EQUIPMENT LISTED ON S-1738-354. (YOWLUMNE TANK BATTERY)

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems 1. capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V
- Vapors shall vent only through gas line compressor. [District NSR Rule] Federally Enforceable Through Title V **Permit**
- All piping, valves and fittings shall be maintained in a leak-free condition as defined in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- Liquids from the knockout vessel shall be disposed of in a manner preventing VOC emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- Storage tank p/v caps shall be set to relieve pressure at a pressure level higher than that required to actuate compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- Storage tank p/v caps shall be leak-free (except for inbreathing) during normal operation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18, and 6.4.8] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQ CONTINUE ON NEXT PAGE These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-355-1: Jan 28 2010: 9 54AK-- SONGCOJ

- 11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 16. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. Formerly permit number S-1136-49-0.
- 20. Formerly permit number S-1548-188-0.
- 21. Formerly permit number S-3898-6.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA
S-1738-355-1: Jan 28 2010 9-544M-: SIONGCOJ

PERMIT UNIT: S-1738-356-1

SECTION: 04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2006 SERVED BY VAPOR CONTROL

EQUIPMENT LISTED ON S-1738-354. (YOWLUMNE TANK BATTERY)

PERMIT UNIT REQUIREMENTS

The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V **Permit**

- Vapors shall vent only through gas line compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- All piping, valves and fittings shall be maintained in a leak-free condition as defined in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- Liquids from the knockout vessel shall be disposed of in a manner preventing VOC emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- Storage tank p/v caps shall be set to relieve pressure at a pressure level higher than that required to actuate compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- Storage tank p/v caps shall be leak-free (except for inbreathing) during normal operation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18, and 6.4.8] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REO These terms and conditions of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-356-1: Jan 28 2010 9.54AM -- SIONGCOJ

- 11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 16. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. Formerly permit number S-1136-50-0.
- 20. Formerly permit number S-1548-189-0.
- 21. Formerly permit number S-3898-6.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA
5-1736-356-1: Jan 28 2010 95-444 - SONGCOJ

PERMIT UNIT: S-1738-357-1

SECTION: 04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2007 SERVED BY VAPOR CONTROL

EQUIPMENT LISTED ON S-1738-354. (YOWLUMNE TANK BATTERY)

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems 1. capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- Vapors shall vent only through gas line compressor. [District NSR Rule] Federally Enforceable Through Title V **Permit**
- All piping, valves and fittings shall be maintained in a leak-free condition as defined in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- Liquids from the knockout vessel shall be disposed of in a manner preventing VOC emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- Storage tank p/v caps shall be set to relieve pressure at a pressure level higher than that required to actuate compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- Storage tank p/v caps shall be leak-free (except for inbreathing) during normal operation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18, and 6.4.8] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT part-of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1735-357-1 Jun 28 2010 9 544M - 50NGCOJ

- 11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 13. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 16. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. Formerly permit number S-1136-51-0
- 20. Formerly permit number S-1548-190-0.
- 21. Formerly permit number S-3898-8.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN BERN COUNTY, KERN COUNTY, CA
\$-1738-357-1: Jan 28 2010 9.54AM -- SIONGCOJ

PERMIT UNIT: S-1738-358-1

SECTION: 04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

42,000 GALLON (1,000 BBL) FIXED ROOF WATER TANK SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON S-

1738-354. (YOWLUMNE TANK BATTERY)

PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor loss prevention system consisting of vapor and condensate collection systems capable of reducing VOC emissions by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Vapors shall vent only through gas line compressor. [District NSR Rule] Federally Enforceable Through Title V
 Permit
- 3. All piping, valves and fittings shall be maintained in a leak-free condition as defined in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. Liquids from the knockout vessel shall be disposed of in a manner preventing VOC emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Storage tank p/v caps shall be set to relieve pressure at a pressure level higher than that required to actuate compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Storage tank p/v caps shall be leak-free (except for inbreathing) during normal operation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess of 10,000 ppmv above background or the dripping of organic liquid at a rate of more than 3 drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18, and 6.4.8] Federally Enforceable Through Title V Permit
- 9. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
- 10. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REDURE MENTS ON NEXT PAGE
These terms and conditions pie part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE.WESTERN KERN COUNTY, KERN COUNTY, CA

5-1738-358-1 : Jan 28 2010 9.54AM - SIONGCOJ

- 11. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 12. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
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- 14. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 15. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 16. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
- 17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. Formerly permit number S-1136-54-0.
- 20. Formerly permit number S-1548-193-0.
- 21. Formerly permit number S-3898-9.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LERN COUNTY, KERN COUNTY, CA 5-1738-358-1: Jan 28 2010 9 54AAI - SIONGCOJ

PERMIT UNIT: S-1738-359-1

SECTION: 33 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

208 WAUKESHA MODEL F1905GRU SERIAL NO Y00002 NATURAL GAS-FIRED IC ENGINE

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmy @ 15% O2, CO: 2000 ppmy @ 15% O2, or VOC: 95 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 108] Federally Enforceable Through Title V Permit

PERMIT UNIT REDUIREMENTS ON THE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

S-1738-359-1 : Jan 28 2010 9 54AM -- SIONGCOJ

- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701, 4702, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 13. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 17. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.21 Federally Enforceable Through Title V Permit
- 20. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-355-1 : Jan 28 2010 9 54AM - SIONGCOU

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 22. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. Formerly permit numbers S-1136-95-2 and S-1548-196-2.
- 27. Formerly permit number S-3898-10.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA
\$-1738-359-1: Jan 28 2010 8:54AM.—SONGCOJ

PERMIT UNIT: S-1738-360-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

DORMANT 208 HP WAUKESHA, MODEL F1905, NATURAL GAS-FIRED I.C. ENGINE (S/N Y00003) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. When dormant the fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 95 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- 7. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use an alternative device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. The owner or operator shall maintain these required meters in proper operating condition. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
- 8. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REDUIREMENTS OONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

5-1738-360-1 : Jan 28 2010 9.54AM - SIONGCO

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 18. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 21. Particulate emissions shall not exceed at the point of fischarge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

PERMIT UMT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-360-1 : Jan 28 2010 9 54AM - SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 22. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. Upon recommencing operation, permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. Formerly permit numbers S-1136-97-2 and S-1548-197-2.
- 31. Formerly permit number S-3898-11.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LIERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-361-1

SECTION: 03 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

208 HP WAUKESHA, MODEL F1905GRU, NATURAL GAS-FIRED I.C. ENGINE (S/N Y00001) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]

- Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 95 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENT These terms and conditions are part-of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA Location:

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- 6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 7. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 17. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-361-1; Jan 28 2010 9:54AM - SIONGCOJ

- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 22. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 24. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 30. Formerly permit numbers S-1136-99-2 and S-1548-198-2.
- 31. Formerly permit number S-3898-12.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA \$-1738-381-1; Jan 28 2010 9-54AM -- SONGCOJ

PERMIT UNIT: S-1738-362-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

316 HP WAUKESHA MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE (S/N 52695) WITH CATALYTIC

CONVERTER AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 2. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation, emissions rates shall not exceed any of the following: PM10: 0.075 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 52 ppmvd @15% O2; CO: 2000 ppmvd @15% O2; or SOx (as SO2): 0.011 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 7. Upon recommencing operation, if the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and lesting required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.
ON CALIFORNIA LLC

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- 8. Upon recommencing operation, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 9. Upon recommencing operation, source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Upon recommencing operation, for representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Upon recommencing operation, should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. Upon recommencing operation, compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Upon recommencing operation, source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Upon recommencing operation, the results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Upon recommencing operation, the following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. Upon recommencing operation, permittee shall maintain records of operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 19. Upon recommencing operation, portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Upon recommencing operation, emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 hirry-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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- 21. Upon recommencing operation, the following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs. 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Upon recommencing operation, all units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Upon recommencing operation, the number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Upon recommencing operation, sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 25. Upon recommencing operation, particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 26. Upon recommencing operation, if the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 27. Upon recommencing operation, if the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. Upon recommencing operation, if the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. Upon recommencing operation, the operator of an internal combustion (IC) engine shall maintain records of the quantity (cubic feet of gas) of fuel used, and shall make such information available for District inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 30. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 31. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. Upon recommencing operation, permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 33. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit

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 These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA 5-1736-362-1: Jan 28 2010 9.54AM - SIONGCOJ

- 34. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 35. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 36. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 37. Formerly permit numbers S-1136-119-2 and S-1548-199-2.
- 38. Formerly permit number S-3898-13.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-363-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

316 HP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE (S/N 52696) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 52 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- 3. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

cation: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- 6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 7. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 17. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC VILLE VILLE COUNTY, KERN COUNTY, CALIFORNIA LLC VILLE VILLE

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- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 21. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 23. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 29. Formerly permit numbers S-1136-121-2 and S-1548-201-2.
- 30. Formerly permit number S-3898-15.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LERN COUNTY, KERN COUNTY, CA S-1738-363-1: Jan 28 2010 9.55AM -- SIONGCOJ

PERMIT UNIT: S-1738-364-1

SECTION: 05 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

316 HP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE (S/N 52733) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 2. Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 52 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- 3. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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These terms and conditions are part of the Facility-wide Permit to Operate

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request, [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 17. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNTIRE OUR RENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location:

- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 21. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 23. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 29. Formerly permit numbers S-1136-122-1 and S-1548-202-2.
- 30. Formerly permit number S-3898-16.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA S-1738-38-1: Jan 28 2010 9.554M-SIONGCOJ

PERMIT UNIT: S-1738-365-1

SECTION: 04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

316 HP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE (S/N 52732) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]

- Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 52 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

These terms and condit

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA Location:

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 17. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT LIMIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location: 1738-365-1 : Jan 28 2010

- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 21. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 23. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 29. Formerly permit numbers S-1136-123-2 and S-1548-203-2.
- 30. Formerly permit number S-3898-17.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA
5-1738-365-1: Jan 28 2010 9 55AM - SIONGCOJ

PERMIT UNIT: S-1738-366-1

SECTION: 03 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

316 HP WAUKESHA MODEL H2476GU NATURAL GAS-FIRED IC ENGINE (S/N 52734) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without Authority to Construct for that modification(s), except for changes specified below. [District Rule 2010] Federally Enforceable Through Title V Permit

- 2. When this unit is not operated the fuel supply line shall be physically disconnected from this unit. [District Rule 2010] Federally Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with NOx, CO, and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4701] Federally Enforceable Through Title V Permit
- 4. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rule 1070] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 52 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701]
- 7. Upon recommencing operations, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Opera

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 17. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 20. Particulate emissions shall not exceed at the point of fischarge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

PERMIT UNTIREDUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-366-1 : Jan 28 2010 9.55AM - SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 21. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 27. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

- 33. Formerly permit numbers S-1136-124-2 and S-1548-204-2.
- 34. Formerly permit number S-3898-18.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA
5-1738-366-1: Jan 28 2010 9 55AM:— SIONGCOJ

PERMIT UNIT: S-1738-367-1

SECTION: SE03 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA NATURAL GAS FIRED I. C. ENGINE (S/N 369588) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4701) the fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO, and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4701] Federally Enforceable Through Title V Permit
- Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation. [District Rule 1070] Federally Enforceable Through Title V Permit
- Records of when the fuel supply is disconnected and reconnected shall be maintained. The records shall include identification of the equipment, dates of the disconnect and reconnection of the fuel supply line, and identification of the individual performing the action. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 52 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4702 and 4701] Federally Enforceable Through Title V Permit
- Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT These terms and condit

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-367-1: Jan 28 2010 9 554M - SIONGCOJ

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rule 4701 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 17. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 20. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

PERMIT LINT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location: S-1738-367-1; Jan 28 2010 9:55AM - SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 21. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 32. Formerly permit number S-1548-216.
- 33. Formerly permit number S-3898-19.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN GERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-368-1

SECTION: NE03 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

208 BHP WAUKESHA, MODEL F1905GRU, NATURAL GAS-FIRED IC ENGINE (S/N 70302) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER (DORMANT)

PERMIT UNIT REQUIREMENTS

- 1. This dormant emissions unit shall not be operated for any reason until an Authority to Construct permit is issued approving all necessary retrofits required to comply with the applicable requirements of District Rule 4702 and all other applicable District regulations. [District Rule 4702] Federally Enforceable Through Title V Permit
- No modification to this unit shall be performed without an Authority to Construct for that modification(s), except for changes specified in condition 3 below. [District Rule 2010] Federally Enforceable Through Title V Permit
- The fuel supply line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 250 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQ These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC OCATION: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 4701] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 19. Particulate emissions shall not exceed at the point of flischarge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

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LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location:

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

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- 20. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 24. Formerly permit numbers S-1136-99-2 and S-1548-198-2.
- 25. Formerly permit number S-3898-20.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA S-1738-368 1: Jan 28 2010 9.55AM - SIONGCOJ

PERMIT UNIT: S-1738-369-1

SECTION: 33 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA NATURAL GAS FIRED I. C. ENGINE (S/N 295572) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rules 4701 and 4702) the fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO, and VOC 'emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4701] Federally Enforceable Through Title V Permit
- 3. Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. Records of when the fuel supply is disconnected and reconnected shall be maintained. The records shall include identification of the equipment, dates of the disconnect and reconnection of the fuel supply line, and identification of the individual performing the action. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 52 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 7. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

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- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 17. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 20. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

PERMIT LINT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

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Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 21. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 25. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 32. Formerly permit number S-1136-307-2.
- 33. Formerly permit number S-3898-21.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA
S-1738-369-1; Jan 28 2010 9:55AM - 90NGCOJ

PERMIT UNIT: S-1738-370-1

SECTION: SE04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

CLASS II LPG LOADING OPERATION WITH 50,000 GALLON (11 FT. DIA. X 75 FT. LONG) BULLET TANK INCLUDING 3" LOADING LINE, 1.5" VAPOR LINE, LOADING PUMP WITH 15 HP (MAXIMUM) MOTOR, NITROGEN PURGE SYSTEM, AND ADDITIONAL PIPING, VALVES, AND CONNECTIONS

PERMIT UNIT REQUIREMENTS

- Facility shall load less than 20,000 gallons of organic liquids in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Organic liquid loading facility shall be equipped with vapor recovery system which prevents release to the atmosphere of at least 95% of VOC displaced during the loading operation. [District Rule 4624] Federally Enforceable Through Title V Permit
- All piping, valves, flanges, and connections shall be constructed, maintained and operated such that there are no leaks or no excess organic liquid drainage (as defined in Rule 4624) at disconnections. [District Rule 4624 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- Vapor return hose shall be connected to truck tank vapor space whenever liquids are being transferred. [District Rule 4624 and 2520, 9.3.21 Federally Enforceable Through Title V Permit
- Liquid transfer line couplings shall be purged with nitrogen prior to disconnect. [District Rule 4624 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- Records of daily throughput shall be maintained, retained on the premises for at least 5 years and made available for District inspection upon request. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Operator shall maintain all records of required monitoring data and support information for inspection for a period of 7. five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- All delivery tanks which previously contained organic liquids with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 2 loading facilities equipped with a system to control at least 95% of VOC displaced. [District Rule 4624] Federally Enforceable Through Title V Permit
- Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
- 10. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 mls per average of 3 consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREME CONTINUE ON NEXT PAGE These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE, WESTLERN KERN COUNTY, KERN COUNTY, CA S-1738-370-1: Jan 28 2010 9:55AM -- SIONGCOJ

- 11. During the loading of organic liquids, the operator shall perform and record the results of monthly leak inspections of the loading and vapor collection equipment at each loading arm. Leak inspections shall be conducted using sight, sound, smell and instrument methods to detect leaks. Instrument detection shall be conducted using EPA Method 21 and shall be measured at a distance of one centimeter from the potential source. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4624 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 12. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
- 13. Corrective steps shall be taken at any time the operator observes excess drainage at disconnect. In addition, the operator shall perform and record the results of monthly drainage inspections at disconnect for each loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Compliance with organic liquid drainage limit shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one (1) minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 15. Each detected leak shall be repaired within 15 calendar days of detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 16. The permittee shall maintain an inspection log containing at least the following: A) dates of leak and drainage inspections, B) leak determination method, C) findings, D) corrective action (date each leak or excess drainage condition repaired, reasons for any leak repair interval in excess of 15 days), and E) inspector name and signature. [District Rule 4624 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Analysis of halogenated exempt compounds shall be by ARB Method 432. [District Rule 4624] Federally Enforceable Through Title V Permit
- 18. Compliance with permit conditions in the Title V permit shall be deemed compliance with District Rules 4624 (as amended December 20, 2007). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 19. Formerly permit number S-1136-612-3.
- 20. Formerly permit number S-1548-289-0.
- 21. Formerly permit number S-3898-25.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA 5-1738-370-1: Jan 28 2010 9:55AM - SIONGCOJ

PERMIT UNIT: S-1738-371-1

SECTION: SE04 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

208 HP WAUKESHA MODEL F1905GRU NATURAL GAS-FIRE IC ENGINE (S/N 70480) WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without Authority to Construct for that modification(s), except for changes specified below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. When this unit is not operated the fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with NOx, CO, and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rule 1070] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emission rates shall not exceed any of the following: NOx (as NO2): 25 ppmv @ 15% O2, CO: 2000 ppmv @ 15% O2, or VOC: 95 ppmv @ 15% O2. Emission limits are on a 15 minute average. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 7. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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These terms and conditions are part of the Facility-wide Permit to Operate

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2. (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 17. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 20. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

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Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

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- 21. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 25. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 27. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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These terms and conditions are part of the Facility-wide Permit to Operate.

- 33. Formerly permit numbers S-1136-629-0 and S-1548-291-2.
- 34. Formerly permit number S-3898-26.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN BERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-372-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 382036) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 1. 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENT These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-372-1 : Jan 28 2010 9.554M - SIONGCOJ

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location: S-1738-372-1 : Jan 28 2010 9 55AM - SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-341.
- 32. Formerly permit number S-3898-27.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA
S-1738-372-1: Jan 28 2010 9 55AM - SONGCOJ

PERMIT UNIT: S-1738-373-1

SECTION: 03 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 335157) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 2. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REOLLISCHE LATS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

S-1738-373-1 : Jan 28 2010 9 55AM - SIONGCOJ

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months. except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT PATE CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA 5-1736-373-1: Jan 28 2010 9.554N - SONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-342.
- 32. Formerly permit number S-3898-28.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA 5-1736-373-1: Jan 28 2010 9.55AM - SONGCOJ

PERMIT UNIT: S-1738-374-1

SECTION: 33 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 361233) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- When this unit is not operated, the fuel line shall be physically disconnected from this unit. [District Rule 4702] 1. Federally Enforceable Through Title V Permit
- Permittee shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Upon recommencing operation, emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Upon recommencing operation, if the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENT These terms and conditions are

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-374-1: Jan 28 2010 9 55AM - SIONGCOJ

- Upon recommencing operation, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2. (3) make and model of exhaust gas analyzer. (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO, and VOC emission limits shall be performed within 60 days of recommencing operation of the dormant unit, except as provided below. [District Rule 4701 and 4702]
- Upon recommencing operation, source test to show compliance with NOx, CO, and VOC emission limits shall be conducted once every 24 months by District-witnessed sample collection by independent testing laboratory. [District NSR Rule, 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Upon recommencing operation, should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 17. Upon recommending operation, permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-374-1: Jan 28 2010 9:55AM - 90NGCOJ

- 20. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Upon recommencing operation, all units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Upon recommencing operation, the number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Upon recommencing operation, sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 24. Upon recommencing operation, particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 25. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 27. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit

 PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

 These terms and conditions are part of the Facility-wide Permit to Operate.

 y Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 33. Formerly permit number S-1548-343.
- 34. Formerly permit number S-3898-29.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN BERN COUNTY, KERN COUNTY, CA
S-1736-374-1: Jan 26 2010 9-55AM - SIONGCOJ

PERMIT UNIT: S-1738-375-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 381720) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREN These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA Location: LIGHT OIL WES \$-1738-375-1; Jan 28 2010 9.55AM - SIONGCO

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT LINIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-375-1 : Jan 28 2010 9.55AM - SIONGCOJ

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-344.
- 32. Formerly permit number S-3898-30.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA 5-1758-375-1: Jan 28 2010 9:55AM -- SIONGCOJ

PERMIT UNIT: S-1738-376-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 382034-1) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without an Authority to Construct for that modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. When dormant, the fuel supply line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with Rule 4702 emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 4. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
- 7. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions have part-of the Facility-wide Permit to Operation

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- 8. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 9. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC VILLE LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

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- 20. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 22. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 26. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 27. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE part of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location: S-1738-376-1 Jan 28 2010 9 55AM -- SIONGCO

- 33. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 35. Formerly permit number S-1548-345.
- 36. Formerly permit number S-3898-31.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-377-1

SECTION: 4 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 4145) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREME These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Ruled 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

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LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1736-377-1 : Jan 28 2010 9.56AM -- SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-346.
- 32. Formerly permit number S-3898-32.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LERN COUNTY, KERN COUNTY, CA
S1738-377-1: Jan 28 2010 9 56444 - SIONGCOJ

PERMIT UNIT: S-1738-378-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 BHP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 326334) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER (DORMANT)

PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without an Authority to Construct for that modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. A source test, to demonstrate compliance with Rule 4702 emission limits, shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 4. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit, at which time this permit will be administratively modified to remove DEU references. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 7. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule, 4701 and 4702] Federally Enforceable Through Title V Permit
- 8. Upon recommencing operation, permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

S-1738-378-1 : Jan 28 2010 9.56AM - SIONGCOJ

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Upon recommending operation, permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 17. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 20. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

PERMIT UMT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-378-1 : Jan 28 2010 9.56AM - SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 21. Upon recommencing operation, if the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Upon recommencing operation, if the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Upon recommencing operation, permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Upon recommencing operation, the acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. Upon recommencing operation, permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. Upon recommencing operation, if the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. Formerly permit number S-1548-347.
- 30. Formerly permit number S-3898-33.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-379-2

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 399638) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. The permittee shall notify the District at least seven calendar days prior to the designation of this permit unit as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 2. When designated as a dormant emissions unit the fuel supply line shall be physically disconnected from the emissions unit. [District Rules 4701 & 4702] Federally Enforceable Through Title V Permit
- 3. When designated as a dormant emissions unit, the permittee shall not be required to perform source testing or monitoring requirements otherwise required by this permit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. A source test to demonstrate compliance with the NOx and CO emission limits shall be performed within 60 days of recommencing operation of the dormant emissions unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule, 4701 and 4702] Federally Enforceable Through Title V Permit
- 7. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUIRE METAL CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operat

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- 8. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 9. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 19. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA \$1738-375-2: Jan 28 2010 9.56AM -- 90NGCOJ

- 20. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081] Federally Enforceable Through Title V Permit
- 22. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 26. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit
- 27. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-3898-34.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA S-1738-379-2: Jan 26 2010 9 55AM - SONGCOJ

PERMIT UNIT: S-1738-380-1

SECTION: 33 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA MODEL 1197 NATURAL GAS-FIRED IC ENGINE (S/N 335162) WITH CATALYTIC CONVERTER

AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENT These terms and conditions an

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- 6. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 7. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 8. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 9. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNTIRE CHIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA
5-1738-380-1: Jan 28 2010 9 564M - SIONGCOJ

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-349.
- 32. Formerly permit number S-3898-35.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA
S-1738-380-1: Jun 28 2010 9:56AK1 - SIONGCOJ

PERMIT UNIT: S-1738-381-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 326337) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 2. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUIREMENT JOINTHUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1735-581-1, Jan 28 2010 9-5641, - 90NGCOJ

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 93.2] Federally Enforceable Through Title V Permit

PERMIT UM REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201 and Kern County Rule 404] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-350.
- 32. Formerly permit number S-3898-36.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LERN COUNTY, KERN COUNTY, CA

PERMIT UNIT: S-1738-382-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 382034) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without an Authority to Construct for that modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. When dormant, the fuel supply line shall be physically disconnected from this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with Rule 4702 emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 4. Operator shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 6. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
- 7. Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
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Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2. (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT LIMIT REQUIREMENTS CONTINUE ON NEXT PAGE are part of the Facility-wide Permit to Operate.

These terms and conditions Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

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- 20. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 22. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 26. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 27. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Ope

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-382-1: Jan 26 2010 9-56AM - SIONGCOJ

- 33. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 35. Formerly permit number S-1548-351 and S-3898-37.
- 36. Formerly permit number S-3898-37.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA S-1738-382-1: Jan 28 2010 9:56AM - SIONGCOJ

PERMIT UNIT: S-1738-383-1

SECTION: 4 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 353999) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- When dormant the fuel supply line shall be physically disconnected from this unit. [District Rules 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Operators shall notify the District at least seven (7) calendar days prior to recommencing operation of this dormant emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement, [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2: VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule, 4701, and 4702] Federally Enforceable Through Title V Permit
- Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT These terms and condition

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-3831: Jun 28 2010 9:564M - 510NGCOJ

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rule 4702] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit

PERMIT UMIT REQUIREMENTS CONTINUE ON NEXT PAGE part of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

- 20. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 21. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 23. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 480] and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 27. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 28. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 31. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT LIMIT REOUREMENTS CONTINUE ON NEXT PAGE are part of the Facility-wide Permit to Operate. These terms and conditions

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

Location: 5-1736-383-1 : Jan 28 2010 9.56AM -- SIONGCOJ

- 33. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 34. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 35. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 36. Formerly permit number S-1548-352 and S-3898-38.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA S-1738-383-1: Jan 28 2010 9 56AM - SIONGCOJ

PERMIT UNIT: S-1738-384-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 BHP WAUKESHA 1197 NATURAL GAS-FIRED RICH BURN IC ENGINE (S/N 338537) WITH CATALYTIC

CONVERTER AND AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 1. 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4702 and 4702] Federally Enforceable Through Title V Permit
- Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- Upon recommencing operation, emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- Upon recommending operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Upon recommencing operation, if the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and lesting required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUBLICATION TO NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE.WESTERN KERN COUNTY, KERN COUNTY, CA

- Upon recommencing operation, the permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Upon recommencing operation, source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Upon recommencing operation, compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Upon recommencing operation, for representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Upon recommending operation, should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. Upon recommencing operation, compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Upon recommending operation, source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Upon recommencing operation, the results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. Upon recommencing operation, the following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. Upon recommencing operation, permittee shall maintain records of operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 19. Upon recommencing operation, portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Upon recommencing operation, emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 hirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
 PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

- 21. Upon recommencing operation, the following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Upon recommencing operation, all units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. Upon recommencing operation, the number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. Upon recommencing operation, sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 25. Upon recommencing operation, particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 26. Upon recommencing operation, if the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 27. Upon recommencing operation, if the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. Upon recommencing operation, if the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. Upon recommencing operation, the operator of an internal combustion (IC) engine shall maintain records of the quantity (cubic feet of gas) of fuel used, and shall make such information available for District inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 30. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 33. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE erms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY. KERN COUNTY. CA S1738-3841: Jan 28 2010 9.564M - SONGCOJ

These terms and conditions are pan of the facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY KE

- 34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 35. Formerly permit number S-1548-353.
- 36. Formerly permit number S-3898-39.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN COUNTY, KERN COUNTY, CA 5-1738-384-1: Jun 28 2010 9.56AM – SIONGCOJ

PERMIT UNIT: S-1738-385-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 328565) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for 1. changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- When dormant the fuel supply line shall be physically disconnected from this unit. [District Rules 2080] Federally 2. Enforceable Through Title V Permit
- 3. A source test to demonstrate compliance with the indicated emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rules 4701 & 4702] Federally Enforceable Through Title V Permit
- Operators shall notify the District at least seven (7) calendar days prior to recommending operation of this dormant emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District Rules 4701, and 4702] Federally Enforceable Through Title V Permit
- Upon recommencing operation, the permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

ONTINUE ON NEXT PAGE These terms and condition:

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 9-1738-385-1: Jan 28 2010 9 554M - 90NGCOJ

- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 14. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 15. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 19. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 470] and 4702] Federally Enforceable Through Title V Permit

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location: S-1738-385-1: Jan 28 2010 9 56AM -- SIONGCO.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 20. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 22. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 23. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 26. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 27. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 29. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 32. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-385-1 : Jan 28 2010 9 56AM - SIONGCOJ

- 33. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 34. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 35. Formerly permit number S-1548-354.
- 36. Formerly permit number S-3898-40.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN DERN COUNTY, KERN COUNTY, CA S-1738-385-1: Jan 28 2010 9 564M -- SIONGCOJ

PERMIT UNIT: S-1738-386-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 328565) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIRE These terms and condition

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA Location:

S-1738-386-1 : Jan 28 2010 9 56AM -- SIONGCOJ

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081 and 4701] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNTITE OUR ENEMTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-386-1 : Jan 28 2010 9:56AM -- SIONGCOJ

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. Formerly permit number S-1548-355.
- 31. Formerly permit number S-3898-41.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN LERN COUNTY, KERN COUNTY, CA
5-1738-385-1: Jan 28 2010 9:56AM - SIONGCOJ

PERMIT UNIT: S-1738-387-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 BHP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 129567) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule, 4701 and 4702] Federally Enforceable Through Title V Permit
- Upon recommencing operation, permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REPLIEREMENTS/GONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA 5-1738-387-1: Jan 28 2010 9-57ALI - SONGCOJ

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Upon recommencing operation, compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701 and 4702] Federally Enforceable Through Title V Permit
- 12. Upon recommending operation, permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 13. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 15. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 16. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 17. Upon recommencing operation, if the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 18. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 19. Upon recommencing operation, if the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit

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LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

- 21. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. Formerly permit number S-1548-347.
- 26. Formerly permit number S-3898-42.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN GERN COUNTY, KERN COUNTY, CA S-1738-387-1: Jan 28 2010 9:57AM - SIONGCOJ

PERMIT UNIT: S-1738-388-1

SECTION: 3 TOWNSHIP: 11N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N Y00004) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 2. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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These terms and conditions are part of the Facility-wide Permit to Op-

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC

LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

S-1738-388-1 : Jan 28 2010 9 57AM -- SIONGCOJ

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits shall be demonstrated not less than once every 24 months, except as provided below. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- Compliance with NOx, CO, and VOC emission limits may be demonstrated by submission of annual source test results from one or more representative IC engines as approved by the APCO. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- For representative testing, an engine operating log shall be maintained for each engine in the group. The log shall include, on a monthly basis, the total hours of operation, and maintenance or modifications performed. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 10. Should any representative engines exceed the required emission limits, each engine in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested engines being considered in violation of this rule. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 11. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain records of either operating hours per day, location (e.g. well number) at which IC engine is operated, source test results, monitoring data, and other information deemed necessary by the APCO to demonstrate compliance with Rules 4701 and 4702 for a period of five years and shall make such records readily available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 16. Portable analyzers will be maintained and calibrated according to the manufacturer's specifications in order to ensure they operate properly and their accuracy remains within specification. EPA protocol calibration gases will be utilized to ensure proper calibration. After a successful calibration, the accuracy of the analyzer may be verified by utilizing reference gases that most closely approximate the emission limit to be checked. Between calibrations, the analyzer shall be checked before each use with reference gases to ensure its sensor cells are operational and accurate. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 17. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx, and CO. [District Rule 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
- 18. The following conditions must be met for representative units to be used to test for pollutant (NOx) emissions for a group of units: 1) all units are initially source tested and emissions from each unit in the group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative units is approved by the District prior to testing. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY, KERN COUNTY, CA S-1738-385-1 : Jan 28 2010 9.57AM -- SIONGCOJ

- 19. All units in a group for which representative units are annually source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative units. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 20. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated; such that in 3 years, all units in the entire group will have been tested at least once. [District Rule 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
- 22. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 23. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 24. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 25. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall monitor and record, on a monthly basis, the catalyst inlet and outlet temperatures. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. The acceptable catalyst temperature differential shall be established by source testing this unit or other representative units as approved by the District. The normal range/level shall be any temperature increase across the catalyst unless compliance with applicable NOx and CO emissions limits have been demonstrated through source testing at a similar temperature drop. [District Rule 4702] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of the date and time of temperature measurements and the measured temperatures. The records shall also include a description of any corrective action taken to maintain the temperature differential at the acceptable level. [District Rule 4702] Federally Enforceable Through Title V Permit
- 29. If the catalyst temperature differential is outside of the normal range/level, the permittee shall notify the District and take corrective action (i.e. temperature differential returned to normal range/level) with one (1) hour of detection. If the catalyst temperature differential rate is not immediately corrected, the permittee shall conduct a source test within 60 days, to demonstrate compliance with the applicable emissions limits at the new temperature differential. [District Rule 4702] Federally Enforceable Through Title V Permit
- 30. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 31. Formerly permit number S-1548-358.
- 32. Formerly permit number S-3898-43.

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE WESTERN GERN COUNTY, KERN COUNTY, CA
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PERMIT UNIT: S-1738-389-1

SECTION: 34 TOWNSHIP: 12N RANGE: 22W

EQUIPMENT DESCRIPTION:

162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE (S/N 399558) WITH CATALYTIC CONVERTER AND

AIR/FUEL RATIO CONTROLLER

PERMIT UNIT REQUIREMENTS

- 1. This IC engine is approved to operate at various unspecified locations within the Yowlumne field (Sections 3, 4, 5, 10, 11, 13, and 14 T11N, R22W, and Sections 32, 33, 34, T12N, R22W). No IC engine shall operate within 183 meters of a receptor. Only two IC engines may operate within 500 meters of a receptor, one of which can operate within 249 meters of a receptor. Receptor means any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 4102]
- 2. Emissions rates shall not exceed any of the following: PM10: 0.01 g/bhp-hr; NOx (as NO2): 25 ppmvd @15% O2; VOC (as CH4): 40 ppmvd @15% O2; CO: 140 ppmvd @15% O2; or SOx (as SO2): 0.001 g/bhp-hr. Emission limits are on a 15 minute average. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 4. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
- 5. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

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Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE, WESTERN KERN COUNTY, KERN COUNTY, CA

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PERMIT UNT REQUIREMENTS CONTINUE ON NEXT PAGE are part of the Facility-wide Permit to Operate. These terms and conditions

LIGHT OIL WESTERN STATIONARY SOURCE WESTERN KERN COUNTY KERN COUNTY. CA Location: S-1738-389-1 : Jan 28 2010 9.57AM - SIONGCO

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC